Overview

The primary goal of the Measurement Science QUERI Program is to integrate measurement science into healthcare for Veterans. Measurement science (defined as the theory, practice, and application of suitable metrics) is at the core of VA’s Learning Healthcare System and is a critical component at every stage of the quality improvement (QI) and implementation process. Using system-wide data to promote performance measurement, improvement efforts, and electronic tools (i.e., clinical reminders) depends on the uniformity of those metrics, the efficiency with which they can be obtained, and the accuracy with which they are measured. Whenever a healthcare decision is made, it must be based on valid and reliable data that are linked with all relevant information. Without meaningful metrics, QI and implementation of effective therapies cannot be accomplished. Specifically, investigators in Measurement Science QUERI collaborate with VA operational partners to:

- Improve quality assessment of colonoscopy,
- Expand integrated pain management programs,
- Evaluate implementation strategies for home-based cardiac rehabilitation, and
- Improve measurement of functional status in older Veterans.

These projects are united by the need to identify and clearly define standardized metrics that facilitate tracking of future benefits (or harms). Measurement Science QUERI also includes a unique training component designed to accelerate the dissemination of evidence-based therapies by integrating an implementation science curriculum into training programs and involving health professional trainees in quality improvement projects. This not only increases their motivation to engage in continuous quality improvement, but also accelerates the implementation of evidence-based practices by providing trainees with the skills to become future leaders in these areas.

Implementation Strategy

Working with training programs is a mechanism to accelerate the pace of adoption of evidence-based practices. Diffusion of Innovation theory finds that cumulative adoption typically follows an S-shaped curve, where once approximately 10-25% of a population adopts an innovation, a “tipping point” is reached and rapidly adopted by a majority of potential users until only a minority of final adopters remains. Leaders of training programs represent ideal “Early Adopters” given their advanced education and leadership positions. They can then encourage trainees to be part of the early majority and help adoption reach a critical mass to become self-sustaining.
Project Summaries

- This project seeks to improve the quality of colonoscopy care through a standardized assessment of colonoscopy quality metrics and the extraction of relevant electronic data. QUERI investigators also will test the assessment’s validity and create a colonoscopy quality report card for physicians to ensure accountability to Veterans and the communities in which they live.

- Investigators in this quality improvement project have used cycles of Plan-Do-Study-Act to iteratively implement and disseminate an Integrated Pain Team throughout the San Francisco VA Healthcare System to optimize pain management and reduce opioid use in Veterans with chronic pain.

- This project is evaluating strategies for the implementation of cardiac rehabilitation programs in accordance with performance measures for secondary prevention published by the American Heart Association and American College of Cardiology.

- QUERI investigators in this project are developing and testing a strategy for implementing routine measurement of functional status in older Veterans in accordance with guidelines set forth by the Expert Recommendations for Implementing Change study.

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Principal Operational Partners
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- Office of Primary Care Services
- Patient Care Services (PCS)
- VINCI (VA Informatics and Computing Infrastructure)
- Specialty Care (SCS):
  - Gastroenterology
  - Cardiology
  - Mental Health
  - Integrated Healthcare
- Geriatrics and Extended Care

For More Information
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